Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. - 72. (Cancelled)

73.   (New) In a transceiver, a method of adapting impulse noise protection capability during steady-state communication or initialization comprising:

receiving using a first FIP setting; and

switching to receiving using a second FIP setting.

74.   (New) The method of claim 73, wherein the switching is based on a detection of errors.

75.   (New) The method of claim 73, wherein at least one of the first or second FIP settings are specified in a message that is received from or sent to a second transceiver.

76.   (New) In a transceiver, a method of adapting impulse noise protection capability during steady-state communication or initialization comprising:

transmitting using a first FIP setting; and

switching to transmitting using a second FIP setting.

77.   (New) The method of claim 76, wherein the switching is based on a detection of errors.

78.   (New) The method of claim 76, wherein at least one of the first or second FIP settings are specified in a message that is received from or sent to a second transceiver

79.   (New) In a multicarrier modulation environment, a method for determining a length of an impulse noise event comprising:

demodulating a plurality of bits using a bit allocation table; and

comparing the demodulated bits to a known bit pattern, wherein inconsistencies between the demodulated bit pattern and the known bit pattern are used to determine the length of the impulse noise event.

80.   (New) The method of claim 79, wherein a forward error correction and interleaving function is disabled.

81.   (New) The method of claim 79, further comprising transmitting a message indicating the length of the impulse noise event.

82.   (New) The method of claim 79, wherein the length of the impulse noise event is determined based on at least one of a length in time, a number of affected bits, a number of affected ATM cells, a number of affected DMT packets, a number of affected DMT symbols and a number of affected FEC codewords.

83.   (New) The method of claim 79, further comprising comparing the demodulated bits to a predefined transmitted bit pattern to determine a repetition rate of a length of an impulse noise event.

84.   (New) A method of impulse noise length period determination comprising:

comparing bits demodulated using a bit allocation table to a known bit pattern, the comparison revealing inconsistencies that are correlated to a length of an impulse noise event; and

comparing the length of the impulse noise event to lengths of other similar impulse noise events to determine a period therebetween.

85.   (New) A impulse noise length period determination system comprising:

means for comparing bits demodulated using a bit allocation table to a known bit pattern, the comparison revealing inconsistencies that are correlated to a length of an impulse noise event; and

means for comparing the length of the impulse noise event to lengths of other similar impulse noise events to determine a period therebetween.

86.   (New) A transceiver capable of adapting the impulse noise protection capability during steady-state communication or initialization comprising:

a receiver portion capable of receiving using a first FIP setting; and

a synchronization module capable of coordinating switching to receiving using a second FIP setting.

87.   (New) A transceiver capable of adapting the impulse noise protection capability during steady-state communication or initialization comprising:

a transmitter portion capable of receiving using a first FIP setting; and

a synchronization module capable of coordinating switching to transmitting using a second FIP setting.